

# Logic, Act and Product

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Logic and psychology overlap in judgment, inference and proof. The problems raised by this commonality are notoriously difficult, both from a historical and from a philosophical point of view. Sundholm has for a long time addressed these issues. His beautiful piece of work [[Sundholm\(2002\)](#)] begins by summarizing the main difficulty in the usual provocative manner of the author: one can start, he says, by the act of knowledge to go to the object, as the Idealist does; one can also start by the object to go to the act, in the Realist mood; never the two shall meet. He is himself inclined to accept the first perspective as the right one and he has eventually developed an original version of antirealism which starts, not from considerations about the publicity of meaning, in the manner of Dummett, but from an epistemic standpoint, trying to search in a non-Fregean tradition of analysis of judgement and cognate notions a way of founding constructivist semantics. The present paper ploughs the same field. We concentrate on the significance, for Sundholm's program, of the perspective that has been opened by Twardowski in his important essay on acts and products [[Twardowski\(1912a\)](#)].

## **1 Problems for logic in the intentionalist framework**

Judgment can be conceived from two different standpoints: the subjective perspective that takes it as an actual episode in the mental life of the judger, and the objective perspective that considers it as related to real or ideal entities whose conformation makes the judgment correct or wrong in a determinate way.

On the objectivist side, one finds philosophers - Frege could be taken as a paragon of this view - who claim that, to make logic objective, there is no other means than to extrude from the mind the contents of the judgements and to consider them as stable and mind-independent entities. Dummett has convincingly shown that this anti-psychologist move, in its original Fregean form, leads to an 'ontological mythology' [Dummett(1996), 25] - one would like to say an 'epistemological mythology' too: by extruding thoughts from the mind, one has to assume that they populate a 'third realm' of reality, distinct of both the physical and the mental worlds, and one has therefore to solve the new problem that springs up in this way, namely that of explaining how we could cognitively access to these thoughts. According to Dummett, the 'linguistic turn' of philosophy, which is to him the characteristic mark of analytic philosophy, just results from the need of providing a version of anti-psychologism that were free of these mythologies and oddities. The intercalation of words and sentences between the judger and the contents of her judgments preserves the objectivity of judgment while avoiding mythology, by locating meanings outside the mind but firmly in the spatio-temporel world:

One in this position has therefore to look about him and to find and to find something non-mythological but objective and external to the individual mind to embody the thoughts which the individual subject grasp and may assent to or reject. Where better to find it than in the institution of a common language ? (*loc. cit.*)

This interpretation of the linguistic turn, as well as the question whether it should be considered as characteristic of analytical philosophy, have been much discussed in recent philosophical literature, and we will leave it untouched. Rather, our aim is to discuss a similar inflection that the partisans of the subjective approach of judgment have envisaged at the same time to solve symmetric problems raised by the primitive formulation of their theory, to examine the reasons why they eventually renounce to such a linguistic turn, and to argue that they were right in doing so.

The starting point of the subjectivist conception of judgment is a general analysis of mental life, which simply conceives judgment as one of the moods, *inter alia*, of intentionality, beside presentation (*Vorstellung*), emotion, volition and so on. Judgment enjoys no privilege at all: conscious presentation of something is taken as the basic intentional

relation, and judgment is said to follow just the same way as other conscious activities. In the most often quoted passage of his writings, Brentano expresses the point as follows:

Every mental phenomenon is characterized by what the Scholastics of the Middle Ages called the intentional (or mental) inexistence (*Inexistenz*) of an object, and what we might call, though not wholly unambiguously, relationship (*Beziehung*) to a content (*Inhalt*), direction toward an object (which is not here to be understood as meaning a reality (*Realität*)), or immanente objectivity (*Gegenständlichkeit*). Every mental phenomenon includes (*enthält*) something as an object within itself, although they not all do so in the same way. In presentation something is presented, in judgment something is asserted (*anerkannt*) or rejected (*verworfen*), in love loved, in the hate hated, in desire desired and so on [Brentano(1995), 88].<sup>1</sup>

In the Brentanian perspective, propositional attitudes (e.g. judgments) are therefore treated in the same way as non-propositional attitudes as love or hate and the last ones are taken as fundamental [Brandl(1996), 263]. The objects of the judgments are considered as no more structured than the intentional objects involved in other mental phenomena. As a consequence, judgments can even no longer be viewed, in the Aristotelian mood, as referring to conglomerates of elements as subjects and predicates: to Brentano, every judgment is judgment of existence. According to the "ideogenic" theory he defended, the object of a judgment is always a single thing the existence of which is affirmed or denied (e.g. when someone is judging that *S* is *P* she is actually judging that some *S* that is *P* exists): the whole judgment consists in the approval (or denial) of the existence of the presentation you have:

It can be shown with utmost clarity that every categorical proposition can be translated without any change of meaning into an existential proposition, and in that event the "is" or "is not" of the existential proposition takes the place of the copula.

I want to prove this with some examples.

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<sup>1</sup> The translation of *Beziehung* by "reference", as in the English edition quoted, is misleading; "relationship" should be definitely preferred.

(...) The categorical proposition "No stone is living" means the same as the existential proposition "A living stone does not exist" or "There is no living stone" [Brentano(1995), 213-214].

This intentionalist perspective on judgment poses two kinds of problems for logic: the question of the unstructuredness of their contents - judgment is just affirmation or denial of a single presentation -, and the question of their volatility, namely that of their confinement in the episodes of the mental life of individual subjects.

## 1.1 Lack of structure

Logic and psychology jointly contribute to the analysis of judgment. According to a widely shared consensus, psychology deals with the mental act of judging, while logic primarily deals with the content of judgment, and with the act only in an indirect way. Logical constants (negation, conjunction, etc) belong to the content and give him its logical structure. The first duty of logic is to tell, given this structure, what the truth-value of the whole content is, supposed already known the truth-values of the constituent parts that are articulated in the structure. As a second duty, logic has, of course, to tell also which judgments are correct, but this second task is a trivial by-product of the first one: a judgment will be considered as correct if it consists in the assertion of a true content or in the denial of a false content, and as incorrect in the other cases. That amounts to say that, should be no logical structure in the content of judgments, logic would have nothing to say about judgments. To logicians, the first, formidable, difficulty of the intentionalist approach of judgment is this: as intentionalists consider the contents of judgments as simple and devoid of any logical structure, they have nothing to do but keep mute about judgment if the intentionalist is right.

This worrying situation could have been a motive, for logic-minded intentionalists, to bring some changes in Brentanian credo in putting forward, in a way or in another, structured entities - linguistic contents - that were intimately associated to the judging-acts.

One has however to be careful about the exact nature of the problem for which a solution was sought by intentionalists. It has been sometimes said, [Field(1978), 9 sq] being the *locus classicus* in this respect, that 'Brentano's problem' consisted in explaining intentionality - taken as a relation of the subject to propositions, as it is apparently the case

in belief, desire and other mental states - in a naturalistic frame. In other words, Brentano is interpreted as having raised, and declared to be unsolvable in a materialist setting, the question how it is possible, to a bodily creature, to be related to a certain object while no causal transaction between the creature and the objects can be plausibly envisaged as a support or conveyor for the relation. To *this* enigma, a familiar scheme of answer consists in decomposing the intentional relation (let us say  $x$ 's belief that  $A$ ) into two different parts. The first one relates  $x$  to a token of a sentence  $p$  meaning that  $A$  - this first relation is innocuous from a naturalist standpoint, as both relata are physical entities (e.g.  $x$  is ready to sincerely and overtly assent to  $p$  when suitably interrogated, or  $x$  has some neural code for  $p$  in her belief-box, or something else) -, and the second one relates the sentence-type  $p$  to its meaning, namely the proposition that  $A$ . This second relation is taken as as naturalistically innocent as the first one, for it amounts to the familiar relation of linguistic meaning that connects words and things in absence of any physical relation relating them. In short, one solves the intentionality enigma in putting all the weight of the problem on the allegedly unproblematic relation of linguistic meaning. Words, as it were, are in charge of the travel.

For several reasons, *this* 'linguistic turn' has never been seriously envisaged in the intentionalist tradition. First, one has to keep in mind the deep difference between contemporary analytic philosophy of knowledge and mind, and the scene where Brentano, Twardowski and others were playing: as it has been convincingly shown by [Haldane(1989)], the intentionalist tradition was not at all interested in the contemporary 'enigma' of the incorporation of intentional mental states into a physicalist account of the world. Second, the basic items of intentionalist conception are things we do or perform - mental *acts* -, not things we have or live in - mental *states*. This utterly different conception is much less suitable for a 'linguistic turn' in the way Field envisages. Third, Brentano never assumed any strong correspondence between acts of judging and sentences that might be intimate to them. He defends a non-propositional theory according to which, it is sufficient, for two judgments being the same, that their matter (the presentation involved in them) and their form (affirmative or positive) are the same. Nothing linguistic at all is involved in these identity conditions. Moreover, he considers that linguistic utterances - including 'inner' utterances in the silent speech of the judger - are not compulsory ingredients of judging acts for another reason yet, namely that, to him, a judging activity can be performed even in the absence of conceptual

content, as for example when we accept a perceptual experience of something cyan, while we do not possess or do not apply the concept of 'cyan', or when we express our acknowledging of a painful experience by simply crying rather than in an articulate way. Four and not least, intentionalists were well-conscious of the necessity of making room for logic in the analysis of judgment, and therefore of taking it as equipped with a logical structure but, as we are going to develop in the last part of this paper, they considered that this structure should be put on the act-side, not on the content-side.

## 1.2 Volatility

Intentional existence, or rather inexistence, existence in the improper (*nicht wirklich*) sense, is as transitory and personal as the mental acts that host it. The objects to which mental acts refer to just inhabit (*einwohnen*) the individual mind while it acts so and so, and judgment does not make an exception to this rule. What could be added to that? Brentano was not at all interested in the question of the 'ontological status' of intentional objects (an expression that he, incidentally, did not use very often), but he became more and more concerned with an misinterpretation of his doctrine in terms of '*entia rationis*' - his phrase for Platonic entities - and eventually decided to cut short this reading, which he considered as parasitic and mistaken.

An appealing strategy, to deal with a problematic relatum of a relation, is *adverbialization*: one ceases to consider the suspect as a genuine relatum, and one transforms it into a mere *modifier* of the relation, which has therefore one argument less than before. In another context, speaking of propositional attitudes instead of judgments, Quine has envisaged favorably this strategy in a well-known passage of *Word and Object*. After having canvassed various construals of belief-objects, he writes:

A final alternative I find as appealing as any is simply to dispense with the objects of the propositional attitudes. We can continue to formulate (...) the propositional attitudes with the help of the notations of intensional abstraction (...) but just cease to see these notations as singular terms referring to objects. This means viewing "Tom believes [Cicero denounced Catiline]", no longer as of the form '*Fab*' with *a* = Tom and *b* = [Cicero denounced Cataline], but rather of the form '*Fa*' with '*a* = Tom and complex '*F*'. [Quine(1964), 216]

Brentano made a similar move at the end of his career, when he proposed a purely adverbial theory of judgment - as well as of mental acts and life in general -, in which the question of the ontological status of intentional objects was radically emptied of any sense: to mentally refer to an object  $\omega$  eventually became an accidental and transitory monadic state of the subject, a ' $\omega$ -thinking', comparable in this regard to a 'sitting' or to a 'singing'. The price for such an adverbialization is high. First, by making the contents of judgment *mute*, one endangers the architecture of cognitive life: the judgment that *Not A* - more exactly, the judgment that the man in the street calls in this way - should be more, and more specifically, related to the judgment that *A* than sitting and singing are related. Second, one fails to see, in absence of stable relata, what the identity conditions of judgments could be, and what the guarantee that judgments could be made another time by the same individual on another occasion, *a fortiori* how they could be made, with certainty of dealing with the same judgment, by another individual. Now, such iterability and sharability seem mandatory for argumentation, rational discussion, and logic. How to conceive individual and dated acts of judging as token of judgment-types that can be realized by other tokens, in other circumstances or by other individuals ? Here again, there could have been another motive, for the intentionalist tradition, to make adopt a 'linguistic turn'.

Roughly expressed, the stabilization problem is this. Brentano-style psychology has to do with instantaneous acts of mind, while logic is, *prima facie*, concerned with more stable items. Should this last assumption - logic has necessary to do with something stable - be taken as granted, the development of a logic in accordance to the intentionalist principles ought to overcome the momentariness of mental acts by proposing a conception that associates to them stable entities. This stabilization can be sought in two directions, either in considering mental acts as intermittent effects of stable dispositions, or in considering them, or their products, as tokens of general types. Let us consider these two strategies in turn.

The dispositionalist strategy, all things considered, is hardly relevant to the intentionalist case. For, either we take 'disposition' in a weakly causal sense, alluding to the fact that the mental life should enjoy some minimal stability - *once a first judgment has been performed*, it is uncommon that the judger randomly deviates -, or we take it in a strongly causal conception, which has to do with a *direct* explanation of series of transitory judging-acts by deeper and more stable doxastic propensities that were just revealed by the acts they cause. Disposi-

tions, weakly conceived, are of few use: they leave us just with the question we are dealing with, namely that of giving sense to the idea of the repetition of a judgment. As regards the strong sense, which amounts to consider human beings, as it were, as *driven* to judge intermittently but repeatedly in the same way by an underlying force, as radio-active nucleus are bound to lose energy by periodically emitting ionizing particles, it does not the job, either for the analogy rests on a mistake. Propensity to radio-active decay gives raise, at each time of its actualization, to a particle emission from which a punctual decay of radio-activity actually results. Contrastingly, propensity to associate presentations - which is the way dispositionalist theorists (Hume, Bain, Mill, ... ) conceive dispositional beliefs - simply does not result in judging acts, but rather in actual linkages between presentations, what is throughly distinct [Brentano(1995), II, VII, §2].<sup>2</sup> Thus, dispositional beliefs, because they are not dispositions to judge, are not a suitable way of stabilizing judging acts.

The other strategy for stabilizing judging-acts, namely by considering them as tokens of some types, looks much more promising, but it has to overcome a certain number of difficulties:

- a) As the most attested and apparently unproblematic range of application of the pair type/token is the domain of linguistic items (*grosso modo*, there is no insuperable difficulty in asserting that there are two tokens of the type 'there' that are enclosed in this parenthesis), there is a strong temptation to take a 'linguistic turn', namely to embedd mental acts into a world of words and to define act-types as acts directed toward sentence-types. Nonetheless, this move is just unfaithful to one of main Brentano's motto, namely that phrases as '*x* judges that *A*' can be at most tolerated as neutral, minimal and non-committing ways of speaking of mental acts, or of reporting them, in the common idiom, but that they can never be taken at face value, because the actual content of judging-acts is not propositional.
- b) The type/token distinction can be constructed in different ways, which are not equivalent with respect to the scope and significance

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<sup>2</sup>That is not to say, of course, that psychologists near to Brentano remain indifferent to the question of mental habits or psychological tendencies. Quite at the opposite, some of them had strong interest in these dispositions, including under the umbrella of the physical determinants of psychic activity [Höfler(1897), §§ 12 and 25].

of the intentionalist enterprise. On one hand, types can be conceived in an ideal way as entities enjoying some ontological priority relative to the entities that tokenize them (this priority might go so far as to consider as possible, at least conceptually, types that were not exemplified at all); on the other hand, one can think of types as merely resulting by an abstraction process from classes of actual or potential items. Each option has its own advantages and inconveniences. The downward strategy is certainly more appropriate to insure the 'purity' of logic, while the ascending one is largely more comfortable to guarantee that the standards of logic can be actually met.

- c) The types and tokens that are at stake in the present discussion are classified according, not to some unproblematic equivalence relation as typographic equiformity, but to equivalence relations that present much more difficulties, as equivalence in meaning. One has therefore to be prepared to envisage various construals of typification, depending for example on what analysis is provided for the very notion of meaning.

## 2 Intentionalist ways out

### 2.1 Stabilization

As said just above, various strategies of stabilization can be envisaged, and have been in fact developed, in the intentionalist tradition.

[[Husserl\(1900-1901\)](#)] is often taken as having found the Holy Grail: a whole conception of mental life, meaning and logic which meets the opposite requirements of psychic accessibility and objective ideality of the contents. To insure that we are speaking of the same meaning across repeating judging acts, Husserl assumes that acts of judgment have a transcendent ideal content beyond their immanent real one. These ideal, timeless and non-individual contents are nevertheless conceived as displaying themselves before the judge, and therefore as able to be accessed in individual transitory acts of judgement. A detailed discussion of how and whether this kind of conciliation between logic and psychology is possible is largely beyond the scope of the present paper. We prefer focus the discussion on the alternative ana-

lysis presented by [Twardowski(1912a)], which differs from Husserl's conception on several significant points.<sup>3</sup>

After careful examination of the intricacies of the relationship between mental acts and their linguistic expression, Twardowski canvasses an original and detailed theory of the linguistic objectification of judgments, which tries to prevent the mistakes that arise from indiscriminate reliance of their public expression. He firstly considers some wrong ways of stabilizing mental activities by means of language. The most pernicious one, he says, lies in confounding mental acts with their 'external' linguistic expression, as when one equates a singular act of judgment with the affirmative sentence that the judger is disposed to utter at the same moment. The verbal utterance that sometimes accompanies the mental act is in itself unproblematic and hardly worth of mention, as a neutral, minimal and non-committing way for the judger of conveying some information about her own mental life in the colloquial idiom. However, this *enunciatio* is often approximative and in relaxed style, just determinate enough to put the hearer who shares the same situation in a position of getting an idea of the act that has been performed. The tendency of taking this sentence as a perfectly reliable guide to grasp the act leads to major inconveniences, just because the reusability of the sentence does not fit with the momentariness of the act. As early as 1900, Twardowski had shown that this mistake is at the root of the relativism of truth, namely of the doctrine according to which the truth-value of the judgments is subject to variations depending on circumstances. The relativist wrongly assumes, on the basis of the invariance of the linguistic by-products of the judgments, that the judgments themselves do not vary according to circumstances. The use of indexical terms by the judger are a typical

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<sup>3</sup> Twardowski, a pupil of Brentano, was the founder of the Polish School of philosophy. He was not himself a logician in the technical sense of the term. Not to mention Frege, he had no deep acquaintance with mathematics as, for example, Husserl could have. While he was convinced of the importance of Brentano's contribution to logic, he renounced eventually to publish the systematic exposition he had in mind. His manuscript [Twardowski(1924)], which contains significant developments on Brentano's reducibility of any judgment to existential form, stopped after a striking comparison between Brentano and Bolzano. Nevertheless, Twardowski never stop to insist, including against some of his own fellows, on the validity of the 'ideogenic' theory of judgments. He wrote a whole paper in 1907 to defend it, while he recognized that he was at the time in Poland, as it were, the last of the Mohicans: "Only my text adopts the idiogenetic perspective with respect to the essence of a judgment, whereas all of the others subscribe to one of the allogetic theories" [Twardowski(1907), 99].

occasion for such mistakes. The correct view is that the sentence 'It's raining now' does not express the same judgment at any time. Twardowski stresses that the element that varies according to the circumstances is not the truth-value of the judgment, which remains fixed, but the judgment expressed by the sentence:

Although there is a very intimate connection between a judgment, on the one hand, and a statement, which is the external expression of the judgment, on the other, the statement is nonetheless not identical with the judgment (...). The relativists, however, do not take this distinction into account, and only because of this lack of rigour are they in a position of adduce examples of judgments which apparently support their theory concerning the existence of relative truths (...). In the absence of appropriate indications, or as a result of inattentiveness, one may be misled to believe in such cases that an invariance in the expression is accompanied by an invariance in the product bound up to it. Upon closer examination it turns out that the invariance in the mental product was merely illusory, and that in fact what we have is an identity of external expression for two different mental products [Twardowski(1900), 149].<sup>4</sup>

To recover the true content of the judgments from the sentences that are uttered on the occasion of their performance, the replacement of the indexicals by absolute spatiotemporal coordinates is however not sufficient. We should also grasp the whole way the judger uses the words in these sentences and what he really intends to mean by them. To that, it is not enough to belong to the same linguistic community as him, for the relevant notion of meaning is less that of *linguistic* meaning than that of *speaker's* meaning, namely a notion of meaning that involves the communicative intentions of the speaker. As Twardowski

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<sup>4</sup>At the time of this article, Twardowski has not yet established his distinction between actions and products, to which [Twardowski(1912a)] is entirely devoted. In Wartenberg's German translation checked by Twardowski [Twardowski(1902)] the term 'product' is rendered by 'Tätigkeit'. Generally speaking, Twardowski was a passionate and competent philologist, attentive to cross-linguistic evidence and trying to find the most rigorous way of expressing his philosophical views in several languages (Polish, French, German, English). That is the reason why, to interpret his writings, one should keep in mind all the versions and translations of his texts. The systematic trilingual edition [Twardowski(1912b)] of his seminal work has been settled to meet this requirement.

notices, the cause of the fact that "the same statement can express different judgments is to be found (...) in the manner in which we employ speech for expressing our judgments", as it is plainly evident by the fact that we may indifferently answer by 'Yes ! I have' to the two questions whether we have read Sienkiewicz's *Quo vadis* and whether we have ever been married (*op. cit.*, 150).

Twardowski's thesis is not, however, that some judgments might be properly ineffable. The external expression of judgment is indeed in most cases able to "accomplish its objective perfectly in colloquial speech", for the resulting statements are generally intelligible to those around the speaker, since "the circumstances accompanying the speaker's words fill in for what the words do not express" (*loc. cit.*). But his analysis shows that the recourse to the very sentences uttered by the speaker can be hardly considered as a suitable way to stabilize the content of his mental acts beyond the particular circumstances of its performance, for thoroughly different judgments may be expressed by the same words. Linguistic utterances are a reliable guide toward the mental activity of the speaker only insofar as the hearer shares the same communicative situation. For other people, especially for remote readers, the quotational report of these utterances is of few help to decide with certainty what mental act has been performed. Thus, the worst way of referring to a judgment is the paratactic way (' $x$  judges: it's raining'): by the very nature of the judgment, acts of judging cannot be assimilated to acts of saying. This condemnation extends, *a fortiori*, to the elliptic way that takes the mere *enunciatio* for the judgment itself:

Some use 'judgments' to refer to precisely that we here refer to with 'sentence'. Prof Łukasiewicz does so, among others, defining a judgment as a "sequence of words or other signs which state that some object has or does not have a particular attribute" [Łukasiewicz(1971), 497]. But in treating a judgment as a sequence of words or other signs Dr Łukasiewicz must distinguish from this sequence of words or other signs what constitutes its meaning. As a matter of fact, Dr Łukasiewicz also speaks of 'meaning-equivalent judgments', defining them as judgments that "express the same thought in different words" (*ibid*, p. 500). Now, this thought, expressed in those words, is obviously nothing other than a judgment in the sense of a product of an action of judging, thus, if the word 'judgment' is made to serve for

designating a "sequence of words or other signs" that express this sort of thought, an expression will then be lacking for designating such a thought [Twardowski(1912a), 129-130, fn. 56].

The problem raised by Twardowski goes far beyond of the 'practical' difficulty of recovering the thought from the linguistic sentence that accompanies its appearance, or even the 'conceptual' problem of introducing a suitable distinction between the sentence and the thought. It lies in the fact that, if one explains or individuates a thought by a certain relationship to the meaning of a sentence  $p$ , one will be also committed to explain the secondary thought that the sentence  $p$  has just the right meaning, or that the utterance of  $p$  is just the most suitable, in context, to guide the hearer to the content of the primitive thought.

Twardowski's gives to his decoupling of the acts of judgment from their linguistic externalisation an original form by means of his distinction between activities (*czynnościach*) and products (*wytworach*). He claims that the statements that accompany judging acts cannot be considered as their result or products - these products are the judgments themselves -, but rather as derived 'psychophysical' products, namely as the products of a concomitant physical activity (e.g. in the case of a lying act, the psychical product is the lie and the psychophysical product it the sentence that has been insincerely uttered). After quoting approbatively Bergmann, who stresses the transitoriness and the momentariness of the products of the judging activity<sup>5</sup>, he states in clear terms the *stabilization problem*

To be sure, we also say that certain beliefs have persisted through the ages, and that the thoughts of a sage can outlive him. But in these cases the issue is not the continued actual existence of products independent of the actions that produced them; it is, rather, a matter of repeating through a succession of generations actions and products that are similar to those that have occurred in preceding generations, or in that sage. (...) Hence, when we speak on the enduring existence of products of this sort, it is either a matter of the same kind of actions and products repeating themselves, or of their *potential* existence (*op. cit.*, 116).

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<sup>5</sup>"The judgment (*Urteil*) is what emerges simultaneously with the judging (*Urteilen*), and is the immediately vanishing product of the later" [Bergmann(1879), 38].

In other words, the judgments produced by judging-acts are not more enduring as these acts: generally speaking, "there is (...) no place for mental products within the domain of enduring products" (*op. cit.*, 119). Some momentary acts, of course, generate enduring products, in such a way that these products are ontologically distinct of the acts that give birth to them. The act of building a house, for example, belongs to this category, for the house persists in existing beyond the end of the building act. Not so, however, for mental acts as judgments, whose products instantaneously vanish and cannot survive, except by being regenerated and brought into renewed existence by new mental acts of the same kind. To achieve this process in another way than by mere coincidence, language is required. For the linguistic *by-products* that usually accompany the judgmental activities can continue to exist long after the judging-acts that correspond them if their physical substratum is suitable for that, for example if they consist in written words. That does not mean, however, that these words are the fixed content of the judgments considered. As there is no mental endurance beyond renewal of similar mental activity, these words have a mere rôle of *stabilizers*, which is actually played only in the case where they are read, understood and taken as the support and occasion of a new act of the same type, by the same judge who remembers her previous act in this way and iterates it, or by another judge who is lead in this way to consider the presentation involved in the original judgment and to assent it once again on her side:

The issue is not the continued actual existence of products independent of the actions that produced them; it is, rather, a matter of repeating through a succession of generations actions and products that are similar to those that have occurred in preceding generations, or in that sage (...). When we speak of the enduring existence of products of this sort, it is, either a matter of the same kind of actions and products repeating themselves, or of their *potential* existence.<sup>6</sup> It is indeed for this reason that these products may be termed non-enduring, namely, in the sense that they do not endure

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<sup>6</sup>This potentiality may be conceived within the broadest possible scope, as when we speak, say, of the 'existence' of truths which no one knows yet, i.e. of the 'existence' of true judgments that no one has ever passed. Obviously, what is involved here is the capability of passing these judgments, and that which exists is not the judgments but the capacity to pass them.

in the mode of *actual* existence any longer than the action by means of which they originate (*op. cit.*, 116).

Judgments cannot be stabilized beyond the potential reiteration of the judging-acts. In particular, one is not allowed to consider that stability could be actually achieved by means of language, as if a judging-act consisted in being transitorily related, in the mood of assent or of denial, to a fixed propositional content regularly meant or designated by a certain sentence. Quite at the opposite, in saying that a judging-act is merely *accompanied* by a sentence, or creates a token of it as a mere psychophysical by-product, Twardowski considers that the judgment should be considered as the *meaning* of the sentence. This acceptance of 'meaning' is uneasy to grasp<sup>7</sup>, but it is certainly a modest notion, by large not reaching as far as the Husserlian notion of 'irrevocably identifiable' objective meaning. To Twardowski, judging-acts do not refer, with approbative or rejective force, to sentences. In a diametrically opposite way, it is the sentences that express, or refer to, judgments, considered as products of judging acts:

In regard to a mental product that expresses itself *in* a certain psychophysical product - i.e. when that psychophysical product is an expression of the mental product - we occasionally say that the psychophysical product *signifies this mental product*, to wit - that the mental product is signified by means of the psychophysical product. But we only speak that way under quite specific circumstances, namely, when the psychophysical product in which some mental product expresses itself can itself become the partial cause for the subsequent emergence of the same or a similar mental product, and when it plays this role of a partial cause by eliciting the same or similar mental action as that which gave rise to the given psychophysical product (*op. cit.*, 121).

To sum up: the sentence '*p*' means the mental product *J* iff it is both uttered as a by-product of the mental act of producing *J* by the judger and taken as an occasion of a similar mental act by the reader.

That characterization deserves explanation.

a) The question raised by Twardowski is not that of the *effability* of thoughts, namely that whether the mental activity is capable of being suitably expressed by the sentence that means its product. For

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<sup>7</sup>Cf. [Buczyńska-Garewicz(1977)] and [Smith(1989)]

- a psychophysical product may express, in this sense, a mental act, without being taken as the support of a new similar act (the second condition for meaning is compulsory). As an example, a scream expresses the pain of the subject without meaning it, for it does not give rise to a comparable pain in the hearer.
- b) For the same reason, an utterance cannot be taken as a mere *indication* of the underlying judgment, as smoke indicates the fire that causes it. Intimation (*Kundgebung*), namely the voluntary act of making known to the others which judgment one has performed, is not even sufficient. To mean a judgment, a sentence ought to be a *successful* intimation or command, to the reader, of performing the same judgment. This original feature of Twardowski's conception insures the potential convergence of the judges without achieving it by means of the assumption of ideal meanings or of pre-existing contents waiting for being grasped in a way or another by different individuals: meaning is at the very start defined by the fact that speakers and writers should be able to evoke and provoke in their hearers or readers mental acts that are suitably analogue to their own acts. In that way, the meaning of a sentence can be characterized as the equivalence class of the singular mental acts activated in a community by its audition or reading.
- c) In defining meaning in this way, Twardowski expresses a considerable skepticism toward any conception that relies on language and meaning to characterize mental activities. There is no room for 'linguistic turn'. The correct understanding of the others words is viewed as fragile as such an extent that, to insure it, one has to define meaning in terms that already involve mutual comprehension and possible interaction. As a surprising by-product of this view of meaning, the linguistic expression of the judgment is pushed on the side of illocutionary acts, which, in principle, it does not belong to. Judgment, as usually conceived, does not make on others any comparable effect as promises, even in the case when the judging-act is accompanied by the production of voiced or written items. Somebody may be afraid by my threat of punishing her, not at any extent, at least in a so direct way, by hearing my judgment about a related topic. Not so in Twardowskian view, which puts the potential efficacy on the mental life of others among the correctness conditions of the utterances of the judge.

d) Twardowski's road toward stabilization is bottom-up, starting from various individual judgments to come by *abstraction* to a class of similar judgments, instead of starting from hypothetical ideal contents and judgments-types directed toward these contents to come then to individual realizations which were tokenizing those ideal types in the mental life of singular judges. To be plainly rigorous, this abstracting way of achieving generality should settle in clear terms the similarity conditions of individual judgments. By the very nature of the case, one cannot account for these conditions by invoking the conjunction of sameness of propositional content and sameness of attitude (affirmation or denial) toward that content. The similarity should be characterized in psychological terms, by keeping on the side of mental acts. One has to say that Twardowski is less concerned by such a characterization than by establishing that the similarity that is in need of definition can be achieved in a very plausible way by virtue of the bodily, cognitive, linguistic and cultural similarity of the judges:

If an enduring psychophysical product elicits the mental product expressed in it, whether successively in one and the same person, or successively or simultaneously in different persons, then it obviously elicits not just one product but as many as there are actions that produce them. Now, these products will not be completely identical, but will differ from each other to a greater or lesser extent. Suffice it to recall how varied are the mental products that arise in different persons who are affected by the same picture or sentence. However, insofar as we regard that psychophysical product as a product that signifies some sort of mental product, the disparity among the mental products elicited by it dare not go too far - there must a group of common attributes in these individual mental products. And it is precisely these common attributes (in which these individual products accord) that we ordinarily regard as the meaning of the psychophysical product, as the content inherent in it, provided of course that these common attributes correspond to the intent with which that psychophysical product was utilized as a sign. This is also why we say that some sentence arouses 'the same' thought in different individuals, although strictly speaking it arouses as many thoughts as there are persons, since

these thoughts are not identical to each other. But we abstract away from what makes these thoughts differ, and consider as the thought that comprises the meaning of the sentence only those of the thought's constituents that are in accord with each other and with the corresponding constituents of the thoughts of the person who makes use of that sentence. Thus, we speak of only a single meaning of a sign - barring cases of ambiguity - and not of as many meanings as there are mental products that are aroused, or capable of being aroused, by the sign in the persons on whom it acts. Now, a meaning conceived in this manner is no longer a concrete mental product, but something at which we arrive by way of an abstraction performed on concrete products (*op. cit.*, 127-128).

- e) Judgement is not random guess, but cognitive act on the basis on available evidence. Thus, there is some rationale in the fact that the judgments which have been performed, once they find an adequate expression in meaningful statements, are able to provoke in turn other similar judgments. Of course, the intersubjective network of judgments that arise in this way is not to be understood in a merely causal way: linguistic communication does not amount to telepathy, and the public expression of my judgments just provides you with an occasion of following me by making in turn a similar mental act you are entirely responsible for. Nevertheless, one can wonder whether the condition, stated by Twardowski, of provoking the hearer to perform the same judging-act as the speaker is not a bit too strong to define the meaningfulness of a sentence. For it is commonsensical that one may very well understand a sentence without to approve it and grasp what the others think without being in agreement with them. There is here some risk, to the intentionalist, of an infelicitous confusion between mutual understanding and mutual agreement. The rival perspective, which considers judgments as individual acts of approbation or denial directed toward objective, pre-existing propositional contents, is *prima facie* more comfortable in dealing with the problem, for it clearly separates the act of grasping the meaning of the sentence from that of judging whether the sentence, understood in this way, is right or wrong. To solve the problem, it is not enough to insist that, in Twardowskian conception, a sentence can have the meaning it has, while its utterance remains causally inert in some, or even in most, of the people

who hear or read it. For the point is that meaningfulness is only equated with *potential* provocation to act mentally in the same way as the writer, by which Twardowski means that the utterance should be at least efficient on some readers. Therefore, these readers, say the competent readers of the sentence, are just supposed to testify to its meaningfulness by performing the same mental act as the author: nothing has been gained in this way, unless one assumes some intentionalist counterpart of the verificationist theory of meaning, in posing that an adequate and truly meaningful expression of a judgment should put its competent reader in a position of being able, in principle, of recognizing the well-foundedness of the judgment. Twardowski, who never flirted with such extreme verificationism, canvasses an original way of escaping the difficulty, by putting forward a notion which is, in some respect, germane to the propositionalist notion of unasserted content, namely that of *unperformed judgment*. In first place, such an inauthentic judgment is, not a product without producing act - that were a mere *contradictio in adjecto* indeed -, but an effect that has, as its origin, some unusual or non-standard source. That happens, for example, in lies, where the insincere statement may have, and is intended to have, as an effect, some mental act in the hearer, while it has not its standard source, namely a comparable act in speaker's mind. Twardowski calls 'artificial statements' (Polish '*sztuczne powiedzenia*'; German '*künstliche Aussagen*'), or simply 'artifacts' such products, that are of course materially undiscernable from the authentic products they imitate:

Such artifacts occur frequently within the realm of psychophysical products. Ample use of them is made, e.g., by an actor who assumes a demeanor through which some feeling is to be expressed. As a rule, however, the actor actually just pretends to have this feeling, so that this demeanor, that psychophysical product, does not emerge as the result of a genuine feeling that ordinarily expresses itself in such a demeanor, but as the result of a representation of a feeling, that is to say ) as the result of a represented [i.e. imagined] feeling. (...) It is possible to form artificial, surrogate sentences that are not expressions of actual judgments, but rather expressions of artificial products that substitute for actual judgments, namely, merely represented judgments. Hence, the meaning of these artificial sentences will also not be passed judgments (which

is to say, actual judgments) but merely represented judgments - that is to say, the representations of judgments (*op. cit.*, 129-130).

Twardowski gets in this way just what he needs to distinguish between misunderstanding and disagreement: the mental activity that a meaningful statement sets in motion in its reader can be limited to the act of *presentation* of the judgment in question, without reaching the very repetition of the judgement in her own mind. The linguistic traces of the mental activity of others are potentially unfaithful, in the sense that they may leave the hearer uncertain whether the activity has been actually performed or merely envisaged, not to say fainted. One would say, in the traditional vocabulary, that the force, rather than the content, is specifically vulnerable to communicative indeterminacy. Lie is an ever open possibility: there is no physical feature of the utterance which could be taken as an undefeasible warrant that the sentence has been seriously voiced and that an act of assertion has been actually performed. Expressed in Twardowskian language, that means that there is no undefeasible evidence, on the hearer-side, allowing to decide definitely between the standard interpretation (a judging act has been actually performed by the speaker) and the artifactual one (she has just considered the judgment). The undiscernability of the artifactual and the standard or 'charged' utterances *qua* physical products, as well as the reasonable idea of the supervenience of the psychophysical properties of a product upon its physical properties (same speech sounds or written traces, same mental activation in a given hearer/reader at a specified time and place), recommends that we take, as a condition of the understanding of the utterance, the weakest requirement that ought to be satisfied either in the standard or in the artifactual case, namely that we only require, as a condition of understanding, the performance of an act of presentation of the speaker's underlying judgment. As it is impossible to do regularly better, it is enough, to understand in the right way the linguistic traces of the judicative activity of the others, to form in oneself a presentation of what is like to judge as they do: as regards the very replication of this activity, it is, however, not mandatory.

- f) Unperformed judgments play sensibly the same rôle, in the intentionalist framework, as unasserted contents do in the propositionalist perspective, insomuch that Twardowski sometimes expresses

himself as if a judging-act, instead of being the approval or denial of a single presentation, were the act of accepting or rejecting a previously unperformed judgment, namely as if a judging-act consisted in giving, at a second stage, the green light for actual status to unperformed judgments that were candidates merely contemplated at a first stage:

[Artifactual sentences] are not psychophysical products that express actual - that is to say, passed - judgments. They express merely "represented judgments", and these represented judgments only substitute for passed, i.e., actual judgments, just as those sentences substitute for actual sentences, i.e., ones that express actual judgments. In this case, a psychophysical artifact expresses a mental artifact.

Preserved surrogate products of this sort present the most extreme case of making mental products independent of the actions owing to which alone they can truly (actually) exist. Operating with such surrogates in both science and everyday life makes it all the easier to slip into operating with non-surrogate products independently of the actions producing them, especially since it frequently happens that actual and surrogate products appear interchangeable, as, e.g., when we eventually pass a judgment which at first we had contemplated with disbelief (*niedowierzenie*) (*op. cit.*, 130-131).<sup>8</sup>

On this basis, Twardowski develops a *demythologized* interpretation of the Bolzanian notion of 'proposition in itself' (*Satz an sich*), which he conceives, not as a mind-independent entity, but as a judgment 'that has been rendered independent from the action of judging' (*op. cit.*, 131, fn61), namely as 'a product that is taken as independent

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<sup>8</sup>Twardowski's own German version adds that frequent *oscillation* between performing and not performing, which is characteristic of intellectual life, reinforces the misleading impression that judgment is approval or denial of mind-independent prior contents:

Und da wir sowohl in der Wissenschaft als auch im täglichen Leben fort und fort mit solchen unabhängig erscheinenden stellvertretenden Gebilden operieren, umso mehr, als wir sehr oft bald das echte, bald das stellvertretenden Gebilde erzeugen, z.B. in dem Falle wo wir zunächst ein Urteil uns bloß vorstellen, dann es als wahr annehmen also fällen, dann aber wieder an ihm irre werden und es uns aufs neue bloß vorstellen [Twardowski(1912b), 121]

from the activity that normally produces it' [Twardowski(1912b), 122].

To summarize, language participates to the stabilization of the judgments, not by playing an *intermediation* rôle between individual judgers and Fregean thoughts enjoying mind-independence and eternity, but by participating as physical substratum in the process of exchanging, presenting and remembering individual judgments that eventually appear as independent from the activity that produced them. At this stage, unperformed judgments may very well be taken as unasserted contents in intentionalist clothes. As we will argue now, a deep difference, however, separates the two notions as soon as logic appears on the scene.

## 2.2 Logical structure

People who have the slightest tincture of formal logic are taken aback by hearing that Brentano is sometimes credited for a new foundation of the field. Abruptly expressed, one could say that one is at most indebted to him for an analysis of 'It's raining', not even extendable, to his own awoval, to 'Socrates is running'. His attack against the Aristotelian thesis of the reducibility of sentences to the subject-predicate form was not, by large, unprecedented, and many other offensives are more convincing, as the one that stresses the unlikelihood of the reducibility of every relation to a monadic one. To sum up, Brentano did not measure up, at any degree, to competition with Frege, who was definitely the founder of modern logic.

Moreover, few of Brentano's many followers, admirers, thurifers and commentators have perceived in the right way, and tried to defend as a plausible line research *in logic*, his main original idea, namely that of moving the logical structure from the content of judgment to the very act of judging, in short of taking judging acts as the very stuff of logic and of impulsing a dynamic turn for that discipline.

One has to say that the very founding father of contemporary logic, Frege, had declared a *fatwa* against any such move. He argued lengthily that the logical constants ought to be considered as a part of the content of the judgment, not as a modification of the act, and that they are contradictory contents rather than opposite judgements. The topical locus is [Frege(1966)], but he had stated, as early as [Frege(1969)], that he considered that principle as one of his highest achievements. There

is little doubt that the this opinion, coming from someone as Frege, had impressed, not to say intimidated the partisans of intentionalism.

As a matter of fact, the difficulty of moving the logical constants from contents to acts is unequal. For some of them, e.g. conjunction, no real difficulty is raised. These constants are tailored for structuring propositional contents, but they can be acclimated in a smooth and easy way in the realm of judging acts. For example, conjunction makes easily sense for mental acts, for ' $x$  judges that  $A$  and  $B$ ' may be truthfully transformed into ' $x$  judges that  $A$  and  $x$  judges that  $B$ '. Not so for other logical constants, especially for negation: clearly, ' $x$  judges that *Not A*' does not amount to ' $x$  does not judge that  $A$ '. It is the reason why the treatment of the negation focuses the controversy.

To the partisan of propositional content in Frege-style, this problem is easily overcome by internalizing the denial to the current content, namely by prefixing it with a negation sign. She is then in a position of satisfying a certain exchangeability requirement, according to which the denial of  $A$  (whatever  $A$  could be) ought to be correct if and only if the acceptance of  $A$  is wrong: as *Not A* is true iff  $A$  is false, the denial of  $A$ , once rephrased in the assertion of *Not A*, is correct iff *Not A* is true, namely iff  $A$  is false, namely iff the assertion of  $A$  is wrong.

The same move is not open to the intentionalist, who cannot invoke the mutual play of negation and truth-values at the propositional content level. As it certainly belongs to her duties to provide a *logical* explanation of the link between acceptance and denial - these varieties of judgment cannot be simply taken as different, unrelated *species* of the judging activity -, she has to find her own way on the basis of the intentionalist conception of truth and evidence. As we will see, the crucial rôle of unperformed judgments - as distinct of unasserted contents - surfaces at this place.

The intentionalist way out rests on the principle that, to analyse judgments, the right notion is that of evidence rather than of truth, which is only a derivative notion in this field. Brentano's thesis, which simply equates truth with knowability, is this, *expressis verbis*:

The judgment of someone is correct if she judges in the way, someone would judge it as being evident.[Brentano(1974), 139]

Thus, one can judge truly by guess, or without adequate evidence, provided it is possible, to somebody else, to judge in the same way with evidence. Returning to the problem of indicating a suitable logical link between affirmation and denial, the question at stake is clearly that

of defining the conditions for the *correctness* of these acts. Now, an asymmetry between the two species immediately appears, which has no counterpart in the propositionalist framework. Evidence for *A* entitles to affirm that *A*, while the lack of such an evidence does not entitle to deny the same. Sketchily expressed, the lack of evidence is not a variety of evidence, while the lack of truth is a variety of truth-value. The lack of truth of a propositional content guarantees the correctness of the assertion of the negated content, but the lack of evidence of an unperformed judgment is not a sufficient reason to pass the opposite judgment.

To clarify the point, let us suppose that we have just been informed that someone has performed such or such judgment, and let us keep aside any doubt about her performance. As we are not connected with her by other means than language, we do not know, usually, what kind of evidence she had to judge in this way. Suppose however, first, that she has left, not only written traces of her judgment, but also traces of her evidence for this judgment, for example a formal derivation of a theorem if it is a question of mathematics. We have firstly to check the conformity of these traces to some formal standards, just as if we were evaluating the accordance of whatever physical product with an agreed level of quality, then, in case of positive verdict, to try in our turn to perform the mental act of proof that is required, taking the written by-product as guideline ('real' proofs are not signs in the books of mathematics, but mental activities). Let us now take the most frequent case, when the judgment is communicated without justification. As it has been performed on the basis of an evidence that is hidden to us, we cannot do better than to ask ourselves what is like *in general* to perform such a judgment, and what is like *in general* to have evidence for it. The adequate evidence for a denial cannot be limited to a negative verdict concerning her presumptive reasons to judge as she does, or concerning the reasons that present themselves in own mind. In actual fact, an adequate evidence for denial cannot be weaker than a negative review of *any* putative evidence favoring the judgment, which result can be for example achieved by convincing oneself that any 'evidence' of this kind would suffice to establish the opposite of something very simple we have adequate evidence for. To sum up, a denial is, to the evident judger, a *stratified* act, which takes as its basis the presentation of an unperformed judgment and which transforms

any putative evidence for it into evidence for another unperformed judgment, known as incorrect.<sup>9</sup>

The decision of putting the logical structure on the act-side rather on the content-side, not only forces the adoption of non-classical semantics, but raises the vexed issue of psychologism. Anyway, Twardowski was convinced that Brentano's perspective, understood in this manner, cleared up this infamy in the right way:

The differentiation of mental actions and products, as well as the differentiation of the various types of mental products, may render no modest service (...) Indeed, a rigorous demarcation of products from actions has already contributed enormously to liberating logic from psychological accretions. [Twardowski(1912a), 132]

As the respective domains of psychology and logic encompass, according to Twardowski (*op. cit.*, 111), the judgment as an act and the judgment as product, this *satisfecit* is threatened by a sort of dilemma. Either one distinguishes *really* between acts and products, for example in considering that judgments as products inhabit a 'third realm', distinct of both the mental and the physical domains, and then the whole doctrine becomes hardly discernable from Dummett's 'platonian mythology'; or one distinguishes between them in a merely *conceptual* manner, as for example the activity of walking may be distinguished from its concomitant product, the walk, and then the 'rigorous demarcation' between psychology and logic seems to vanish. Actually, there is few doubt that Twardowski chosed the second option. The only reservation one can express in this respect has to do with his apparent confidence that *classical* logic could survive the new, dynamic perspective opened in this way.

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<sup>9</sup>The analysis above is consonant with the conclusions of [Schaar(1997)].

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